

## Second Announcement July 31 and August 1, 2004, Savannah, Georgia

**Pre-Meeting Congress** 

**SPONSORS:** 

Argonne National Laboratory
Carl Zeiss SMT
CEOS
FEI Company

IBM

Lawrence Berkeley National Laboratory
Nion Co.

Oak Ridge National Laboratory

It is our pleasure to provide further information on the 2004 Meeting of the **Focused Interest Group** on "Materials Research in an Aberration-Free Environment". This two day Congress will be held just prior to the annual meeting of the Microscopy Society of America.

The meeting promises extraordinary discussions and interest is growing on a daily basis. Many distinguished colleagues have already agreed to highlight their recent research results, and we expect to confirm others over the next weeks. A *partial list of invited speakers to date:* 

"Sub-Angstrom and sub-eV resolution with the analytical SATEM"

G. Benner et al., Zeiss, Germany

"To correct or not to correct? Strategies if you do and strategies if you don't"

R. Dunin-Borkowski, University of Cambridge, UK

"First experimental proof of spatial resolution improvement in a monochromized and Cs-corrected TEM"

B. Freitag et al., FEI Electron Optics, The Netherlands

"Measuring physical properties at the sub-nm scale in a STEM: the Orsay SuperSTEM project"

A. Gloter et al. Université Paris Sud, France

"Design of an electron optical system for Cc correction"

M. Haider, CEOS, Germany

"A new double-corrected HREM/STEM and its applications for advanced materials research"

J.L. Hutchison, University of Oxford, UK

"Prospects for bright field and dark field electron tomography on a discrete grid"

J. Jinschek et al., Lawrence Berkeley National Laboratory, USA

"Toward ultrafast electron microscopy"

W. King, Lawrence Livermore National Laboratory, USA

"Direct and Indirect Aberration Correction and Compensation for sub Angstrom imaging"

A. I. Kirkland, University of Oxford, UK

"Electron holography with Cs-corrected TEM"

H. Lichte et al., Institute of Structure Physics, Dresden University, Germany

"Correction of spherical aberration in a Focused Ion Beam system by means of space charge"

- J. Orloff, University of Maryland, USA
- "Materials applications of aberration-corrected STEM"
- S. Pennycook, Oak Ridge National Laboratory, USA, and O. Krivanek, NION, USA
- "Magnetic imaging of information storage materials"
- A. Petford-Long, University of Oxford, UK
- "Outline of the mirror corrector for SMART and PEEM3"
- H. Rose, University of Darmstadt, Germany
- "In-situ experiments in the high-voltage microscope in Stuttgart Need for better resolution"
- M. Ruehle, MPI Stuttgart, Germany
- "Opportunities for monochromated ELS in materials science"
- J.C.H. Spence et al., Arizona State University and Lawrence Berkeley National Laboratory, USA
- "HRTEM image simulation of carbon nanotubes in an actual growth environment"
- S. Takeda et al., University of Osaka, Japan
- "A sharper view of Randomness? What aberration-corrected imaging of amorphous materials can reveal"
- M. Treacy, Arizona State University. USA
- "Quantitative aberration-corrected transmission electron microscopy"
- K. Urban, Institut für Festkörperforschung and Ernst Ruska-Centrum, Jülich, Germany
- "Atomic resolution electron tomography: a dream?"
- D. Van Dyck, University of Antwerp, Belgium
- "Developments in XEDS and SCEM as they relate to aberration corrected microscopes"
- N. Zaluzec, Argnonne National Laboratory, USA

## **Organizational aspects:**

- Organizational updates, including the program as it develops further, can be found at <a href="http://ncem.lbl.gov">http://ncem.lbl.gov</a>.
- Travel and accommodation information about Savannah can be found on the MSA website <a href="http://www.microscopy.org/MSAMeetings/MMMeeting.html">http://www.microscopy.org/MSAMeetings/MMMeeting.html</a>. This web page also describes MSA's standard format for abstracts. Participants are encouraged to submit a 2 page abstract using this format that will be honored by an invited talk or a poster presentation. Abstracts must be submitted between May 15, 2004 and June 30, 2004 to a different web site, provided by Cambridge University Press, at <a href="http://bono.cup.org/premeeting">http://bono.cup.org/premeeting</a>. Abstracts will be published by Cambridge Journals Online as Volume 10, supplement 3 of Microscopy and Microanalysis. For submission, please log into the web site and follow the instructions. These delayed deadlines will maximize discussion of late breaking developments.
- Registration fees are collected through the M&M 2004 registration form. Please see the meeting website http://mm2004.microscopy.org and follow links to the registration forms. Discount rates apply if participants register before July 6.
- Further deadlines:

**June 30**: Third Announcement including the program and final organizational details. Closing of the web site for abstract submission.

July 31 and August 1, 2004: Meeting.

Looking forward to sharing our excitement with you in Savannah,

The organizers
Bernd Kabius, Argonne National Laboratory
Christian Kisielowski, Lawrence Berkeley National Laboratory
Ray Phaneuf, University of Maryland
Frances Ross, IBM T. J. Watson Research Center